



EFFECTIVENESS AND CONSTRUCTION OF DIAGNOSIS REMEDIAL PROGRAM WITH REFERENCE TO THE LESSON “REFRACTION OF LIGHT” FROM STANDARD 8

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ABSTRACT

Author had composed the diagnostic remedial program for the lesson of Science 'refraction of light' from standard 8 textbook. Sample had been given diagnostic test. As a sample, standard 8 students studying in shree vishvamitra primary school no. 52 was taken. Problems had been known by this pretest. Remedial work had been done by preparing the program of multimedia approach for that topic. After the application of the program, post achievement test had been taken. Remedial work had been proven meaningful as compared the obtained marks of pre and post achievement test.

1. INTRODUCTION:

In our nation many researches has done but they are still unable to reach to our classrooms. A teacher should take part in research to solve the classroom problems. Thus by preparing diagnosis remedial program effectiveness of classroom teaching can be increased.

2. THE OBJECTIVES OF THE STUDY:

1. To construct a diagnostic test for standard 8 science subject lesson 'refraction of light'.
2. To know the problems of students for this particular topic 'refraction of light'.
3. To compose remedial program to remove disabilities of students for lesson 'refraction of light'.
4. To check effectiveness of remedial work.

3. OPERATIONAL DEFINITIONS OF THE TERMS:

1. **Diagnostic Test:** Diagnostic test means teacher constructed test on lesson 'refraction of light' from standard 8 science subject.
2. **Remedial Program:** Remedial program means multi-media approach to solve the defects of the students for lesson 'refraction of light'.
3. **Pre-test:** pre-test is defined as diagnostic test taken before implementation remedial program for the lesson 'refraction of light'.
4. **Post test:** post-test is defined as diagnostic test taken after implementation remedial program for the lesson 'refraction of light'.
5. **Multimedia approach:** for present purpose multimedia approach is a group of teaching method, teaching with CD-ROM demonstration, lecture, experiment demonstration and practical by the student.
6. **Achievements score:** A total no of marks which students have got for every right answer in diagnostic test.
7. **Effectiveness of program:** It means difference of scores between pre-test and post-test.

4. HYPOTHESIS:

Research Hypothesis: The educational achievement of the students in average marks obtained by them on post test will be higher than those pre-test.

Null Hypothesis: There won't be any significant difference in the students in marks obtained by them on pre-test and post-test.

5. VARIABLES OF THE STUDY:

1. Independent Variable. For the present study diagnostic and remedial program was accepted as independent variable.
2. Dependent variable. Scores obtained by the students on diagnostic test was dependent variable for the present study.

6. RESEARCH METHOD:

The present study was under taken with the help of experimental method.

7. TOOL OF THE STUDY:

The investigator prepared a teacher constructed test for the unit 'refraction of light'. This test is taken as a tool for the present study. The test included 30 questions out of which 20 questions were MCQ type questions. All questions carrying 1 mark.

8. PROGRAMME DESIGN:

After diagnose of the errors of the students remedial teaching program was prepared in the form of multimedia approach which includes CD-ROM demonstration, lecture, experiment demonstration and practical by the student. Thus remedial program was implemented on standard 8 students for unit of science 'refraction of light'.

9. SAMPLE:

For the execution of the remedial program 35 students of Standard 8 were selected from school no. 52 Rajkot.

10. DATA ANALYSIS AND INTERPRETATION:

Through diagnostic test in the form of pre-test and post-test was administered in order to collect student's score in the selected unit 'refraction of light'. The effectiveness was determined on the basis of achievement scores.

Table 1

Type of test	Pre-test	Post-test
No. of students	35	35
Average	11.11	19.89
Standard deviation	4.25	5.31
Maximum score	5	10
Minimum score	22	30
Vismta	0.60	0.12
Kakudta	-0.18	-0.80
T-value	21.94	
Co-relation	0.90	

11. CONCLUSIONS OF THE STUDY:

1. The students had many weaknesses the unit of science 'refraction of light'.
2. Remedial program proved effective in removing the weaknesses of the students, which was shown in pre-test.
3. Educational achievement of the students was increased after remedial work. It means weaknesses of the students for the lesson 'refraction of light' was decreased after remedial program.

12. EDUCATIONAL IMPLICATIONS:

1. A teacher should try to remove weakness of the student for science unit after diagnosis test at school level.
2. A teacher should make audio-visual experiment for the hard topics. By this, he can teach with the new and modern method and he can stop students from being bored.
3. Due to present study, a person can get inspiration of doing analysis of each and every topic so that he could make his teaching easy and students can

understand any topic with continuity and simplicity.

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